```
Hydrophobic
                                                            Hydrophilic
    -1.08
 1
 2
    -1.28
 3
    -1.74
    -1.85
 5
     -2.11
 6
    -1.61
    -1.50
 7
 8
    -1.50
 9
    -1.28
10
    -0.98
11
    -0.38
                                    ==== S
12
     0.07
                                          A =
13
     0.18
                                          L ==
14
     0.48
15
     0.50
16
     0.53
17
     0.42
18
     0.42
                                          Q
                                          Ğ
19
     0.43
20
     0.47
21
     0.23
                                          Q
22
     0.25
                                          Α
23
     0.38
24
     0.38
25
    -0.08
                                         N
26
    -0.08
                                          L
27
    -0.20
28
    -0.20
                                          S
29
    -0.20
                                          K
30
    -0.67
                                ====== F
31
     0.25
32
     0.72
33
     1.17
34
     1.15
35
     1.10
36
     0.82
     0.35
37
                                          E
38
     0.35
                                          Q
39
     0.32
                                          N
40
     0.32
                                          G
41
     0.63
42
     1.38
43
     1.85
44
     1.05
     0.75
45
46
     0.15
                                          h
47
    -0.42
48
    -0.87
49
    -1.43
```

Fig. 1

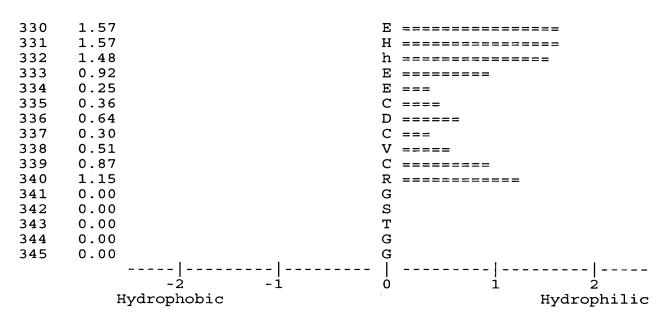
```
50
    -1.10
                         ======== I
 51
     -0.80
                            ====== t
 52
     -0.18
                                  == V
     -0.23
 53
                                  == S
     -0.37
 54
                                ==== T
     -0.25
 55
                                 ===N
 56
    -0.28
                                 === G
     0.22
                                     S ==
 57
 58
     -0.25
                                     Ι
                                 ===
 59
     0.05
                                     Η
                                     S
 60
     0.05
     -0.07
 61
                                   = P
 62
     -0.05
                                     R
     -0.55
                              ===== F
 63
     0.37
 64
                                     P ====
 65
     0.40
                                     H ====
     0.42
                                     T ====
 66
     0.23
 67
                                     У
 68
     -0.08
                                     P
 69
     -0.33
                                 === R
 70
    -1.40
                      ========= N
 71
     -0.93
                           ====== T
 72
     -1.17
 73
     -1.17
                        ======== L
 74
     -0.95
                          ======= V
 75
     -0.95
                          ======= W
 76
     0.12
                                     R =
 77
     0.12
                                     L =
     0.45
 78
                                     V =====
     0.45
 79
                                     A ====
     -0.03
                                     V
 80
 81
     -0.08
                                   = E
 82
     -0.55
                              ===== E
     -1.35
 83
                      ========= N
     -1.45
 84
                      ======== V
 85
     -1.62
                    ======== W
     -0.55
 86
                              ===== I
 87
     0.25
                                     Q ===
     0.72
 88
 89
     0.60
                                     T =====
 90
     0.67
                                     F
      0.78
 91
                                     D
      0.78
 92
                                     Ε
                                       =======
 93
     0.78
                                     R ======
 94
     0.28
                                     F
      1.20
 95
                                     G
 96
      1.70
                                     L =========
 97
      2.50
                                     98
      1.70
                                     D =========
 99
      1.03
                                     P =======
100
      1.53
                                     E ========
101
     0.65
                                     D =====
102
     0.65
                                     D =====
                                 === I
103
     -0.27
104
     -0.22
                                  == C
105
     0.45
                                     K =====
```

```
106
    -0.30
                                  === Y
      0.58
107
                                      D =====
      0.58
108
                                      F =====
109
      1.00
                                      V =======
      1.30
110
111
      1.30
112
      1.55
                                      E =========
113
      0.98
                                      E =======
114
      0.18
                                      P ==
115
     -0.12
                                    = S
116
     -0.17
                                   == D
117
     -0.17
                                   == G
118
     -0.73
119
     -0.83
120
     -0.53
121
     -0.80
                             ===== G
122
     -0.80
                             ====== R
123
     -1.37
                      ======= W
124
     -1.05
                          ======= C
125
     -0.88
                            ====== G
126
     -0.88
                            ======= S
127
      0.18
                                      G ==
128
      0.22
                                      T ==
129
     -0.02
                                      V
130
      0.28
                                      P ===
131
      0.78
                                      G ======
132
      0.78
                                      K ======
133
      0.32
134
      0.32
135
      0.32
                                      S ===
136
      0.77
                                      K ======
137 - 0.03
                                      G
138
      0.47
                                      N =====
139
      0.02
                                      Q
140
    -0.27
                                  === I
141
      0.08
                                      R =
142
      0.08
                                      I =
143
      0.88
                                      R ======
144
      0.00
                                      F
      0.00
                                      V
145
146
      0.25
                                      S ===
147
      0.25
                                      D ===
148
      0.25
                                      E ===
149
     -0.25
                                  === Y
150
     0.13
                                      F
151
      0.13
                                      P =
152
     -0.03
                                      S
153
     -0.38
                                 ==== E
     -0.97
154
                           ======= P
155
     -1.35
                      ======= G
156
     -1.32
                        ======== F
157
     -1.20
158
     -1.28
159
     -1.20
                        ======= H
160
     -1.12
                          ======= Y
161
     -0.70
```

```
162
     -1.15
                         ======== I
     -0.92
163
                            ======= V
164
     -0.17
                                   == M
165
     -0.03
                                      P
166
     -0.28
                                  === Q
167
     -0.27
                                  ===F
168
      0.15
                                      T =
169
      0.27
                                      E ===
170
     -0.48
                                ==== A
171
     -0.70
                              ====== V
172
     -0.45
                                 ==== S
173
     -0.50
                                ==== P
174
     -0.45
175
     -0.58
                               ===== V
176
     -0.63
                               ===== L
177
     -0.33
                                  === P
178
     -0.63
                               ===== P
179
     -0.13
                                    = S
180
     -0.48
                                ==== A
181
     -0.70
                              ====== L
182
     -0.37
183
     -0.33
                                  === L
184
     -0.12
                                    = D
185
     -0.92
186
     -1.18
                         ======== L
187
     -0.97
                          ======= N
188
     -1.42
189
     -2.02
190
     -2.00
191
     -2.00
                 ========= t
192
     -0.93
                            ======= A
193
     -0.35
                                 ==== F
194
     -0.23
                                   == s
195
      0.03
                                      Т
196
      0.60
                                      L =====
197
      0.52
                                      E ====
198
    -0.28
                                  === D
199
     -0.28
                                  === L
200
      0.02
                                      Ι
201
      0.82
                                      R ======
202
      0.82
                                      Y ======
203
      1.03
                                      L =======
204
      1.37
                                      E ========
205
      0.57
                                      P =====
206
      1.07
                                      E =======
207
      0.27
                                      R ===
208
      0.27
                                      w ===
209
      0.93
                                      Q =======
210
      0.60
                                      L =====
211
      0.52
                                      D =====
212
      0.52
                                      L =====
213
      0.82
                                      E ======
214
      0.25
                                      D ===
215
     -0.42
                                 ==== L
216
     -0.08
                                      Y
217
      0.00
                                      R
```

218	-0.80	=======	P	
219	-0.80	=======	Т	
220	-0.23	==	_	
221	-0.15	=		
222	-0.60		-	
			_	
223	-0.55	=====	_	
224	-0.67	======	_	
225	-0.67	======	K	
226	-0.67	======	Α	
227	-0.08	=	F	
228	0.38		V	====
229	1.13		F	========
230	1.30			=========
231	1.05		_	========
232	1.05			========
	0.25			===
234	0.23			==
235	-0.57		V	
236	-0.62	=====	V	
237	-0.43	====	D	
238	-0.43	====	L	
239	0.37		N	====
240	0.08		L	=
	0.88		T.	=======
242	0.88			=======
243	0.57		_	=====
244	0.12		_	
			_	=
245	-0.55	=====	-	
246	-0.37	====		
247	-0.87	=======	_	
248	-0.07	=	_	
	0.35		S	====
250 ·	-0.12	=	C	
251	0.10	· '	T	=
252	-0.08	=	Р	
253	-0.03		R	
254	-0.83	=======	N	
255	-0.37	===		·
	0.55		_	=====
257	1.00			
258				=======
	0.95		S	=======
259	1.40			=========
260	2.20			=======================================
261	1.63	•	E	=======================================
262	1.63		E	==========
263	1.07		L	=========
264	1.07		K	=========
265	0.15		R	=
266	-0.92	========		
267	-0.85	========		
268	-1.35			
269	-1.45		_	
			_	
270	-1.45	==========	-	
271	-1.33	==========	• •	
272	-1.02	========	_	
273	-0.52	=====	G	

274	-0.02		С	
275	-0.02		L	
276	0.28			===
277	0.58		V	=====
278	0.87		K	=======
279	0.20		R	==
280	-0.38	====		
281	-0.38	====	_	
282	-0.55	======	G	
283	-0.85	=======	N	
284	-0.97	========	C	
285	-0.77	======	Δ	
286	-0.85	=======		
			_	
287	-0.65	======	C	
288	0.02	,	L	
289	0.15		Η	==
290	0.27		N	===
291	0.07		C	=
				_
292	-0.02		N	
293	-0.05		Ε	
294	-0.50	====	C	
295	0.17		_	==
			-	
296	-0.12	=		
297	-0.02		V	
298	0.73		Ρ	======
299	1.23		S	
300	1.20			========
301	0.62		-	=====
302	1.37		Т	=======================================
303	1.18		K	=========
304	0.38		K	====
305	-0.08	=		
	-0.40		У	
306		===		
307	0.18		E	==
308	-0.32	===	V	
309	0.43		L	====
310	0.67		O	======
311	0.63		~	=====
312	0.68		R	======
313	0.68		P	======
314	0.68		K	======
315	-0.12	_	Т	
316	-0.13	=		
		=		
317	0.37		V	====
318	0.67		R	======
319	-0.13	=	G	
320	-0.20	==	т.	
321	0.60			
				=====
322	0.43			====
323	-0.15	=	S	
324	-0.50	=====	L	
325	0.30			==='
			_	
326	0.28			===
327	0.10		V	=
328	0.85		Α	=======
329	1.43		L	=======================================
			_	



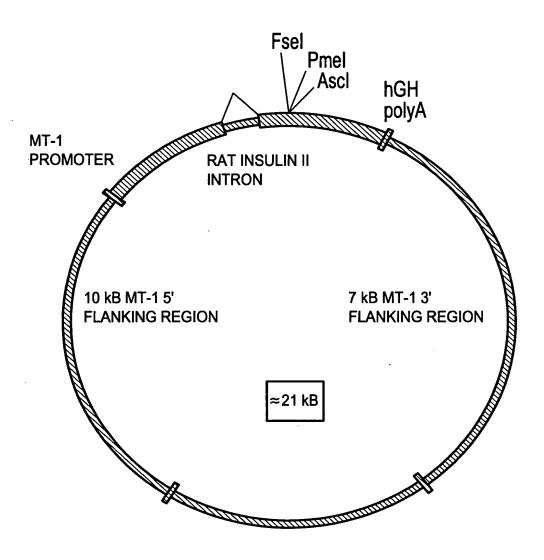


Fig. 2

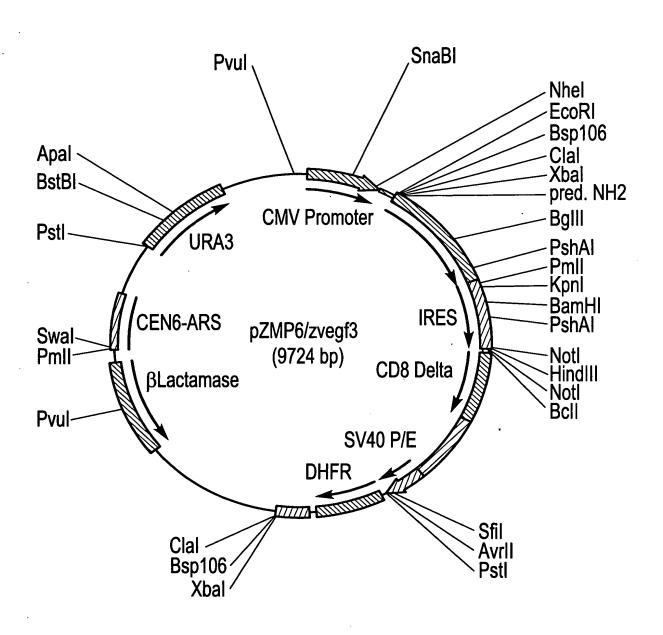


Fig. 3

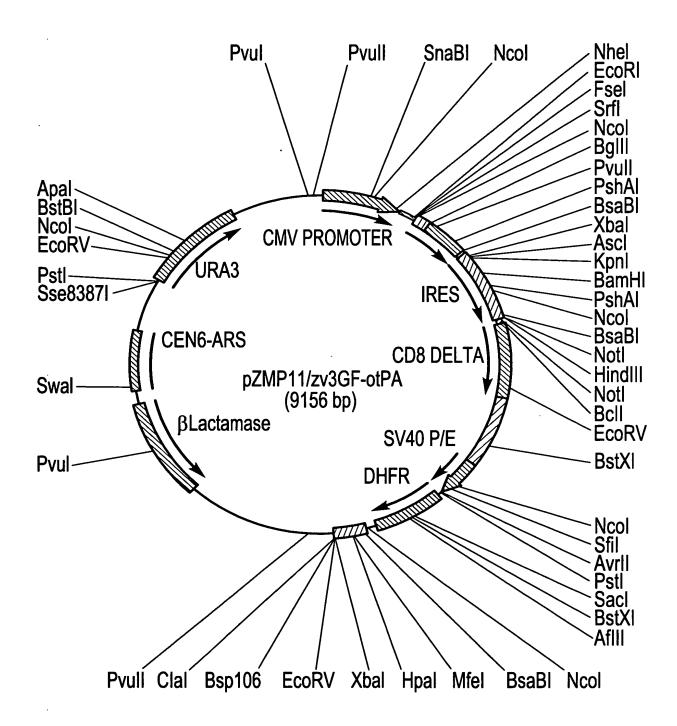


Fig. 4

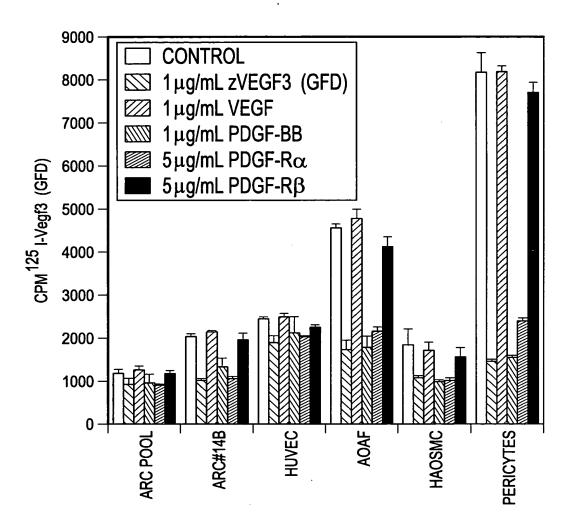


Fig. 5

MSLFGLLLLTSALAGQRQGTQAESNLSSKFQFSSNKEQNGVQDPQHERIITVSTNGSIHS MLLLGLLLLTSALAGQRTGTRAESNLSSKLQLSSDKEQNGVQDPRHERVVTISGNGSIHS PRFPHTYPRNTVLVWRLVAVEENVWIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGTIL PKFPHTYPRNMVLVWRLVAVDENVRIOLTFDERFGLEDPEDDICKYDFVEVEEPSDGSVL GRWCGSGTVPGKQISKGNQIRIRFVSDEYFPSEPGFCIHYNIVMPOFTEAVSPSVLPPSA GRWCGSGTVPGKQTSKGNHIRIRFVSDEYFPSEPGFCIHYSIIMPQVTETTSPSVLPPSS LPLDLLNNAITAFSTLEDLIRYLEPERWQLDLEDLYRPTWQLLGKAFVFGRKSRVVDLNL LSLDLLNNAVTAFSTLEELIRYLEPDRWQVDLDSLYKPTWQLLGKAFLYGKKSKVVNLNL LTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSK LKEEVKLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPRK VTKKYHEVLQLRPKTGVRGLHKSLTDVALEHHEECDCVCRGSTGG (SEQ ID NO:2) VTKKYHEVLQLRPKTGVKGLHKSLTDVALEHHEECDCVCRGNAGG (SEQ ID NO:43)

Fig. 6